

\* SWBAT define and find "Net Force"

\* SWBAT apply the equilibrium rule.

Sep 6-2:31 PM

# Welcome!!!

SECA Physics  
Friday 25 September 2015

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- \* Pick up:
- small slip of paper (for later)

## Opening Activity:

Discuss with a neighbor:

My son and daughter are moving my imaginary piano for me. My son pushes with a force of 10N, my daughter pushes with 5N. What is the **net force** if they are both pushing the piano south down the hallway?

What three parts do we need in the answer?



+

$$\begin{array}{r} +10 \\ -5 \\ \hline +5N \end{array} \quad S$$

Sep 7-7:04 AM

A force is... A PUSH OR A PULL  
 A vector has... SIZE AND DIRECTION

Big Idea for the Day:

What the heck is the Equilibrium Rule?

$\Sigma$   
 THE SUM OF THE FORCES  
 EQUAL ZERO  
 $\Sigma F = 0$

↳ BALANCED  
 OR STEADY

Let's do first 3 together...

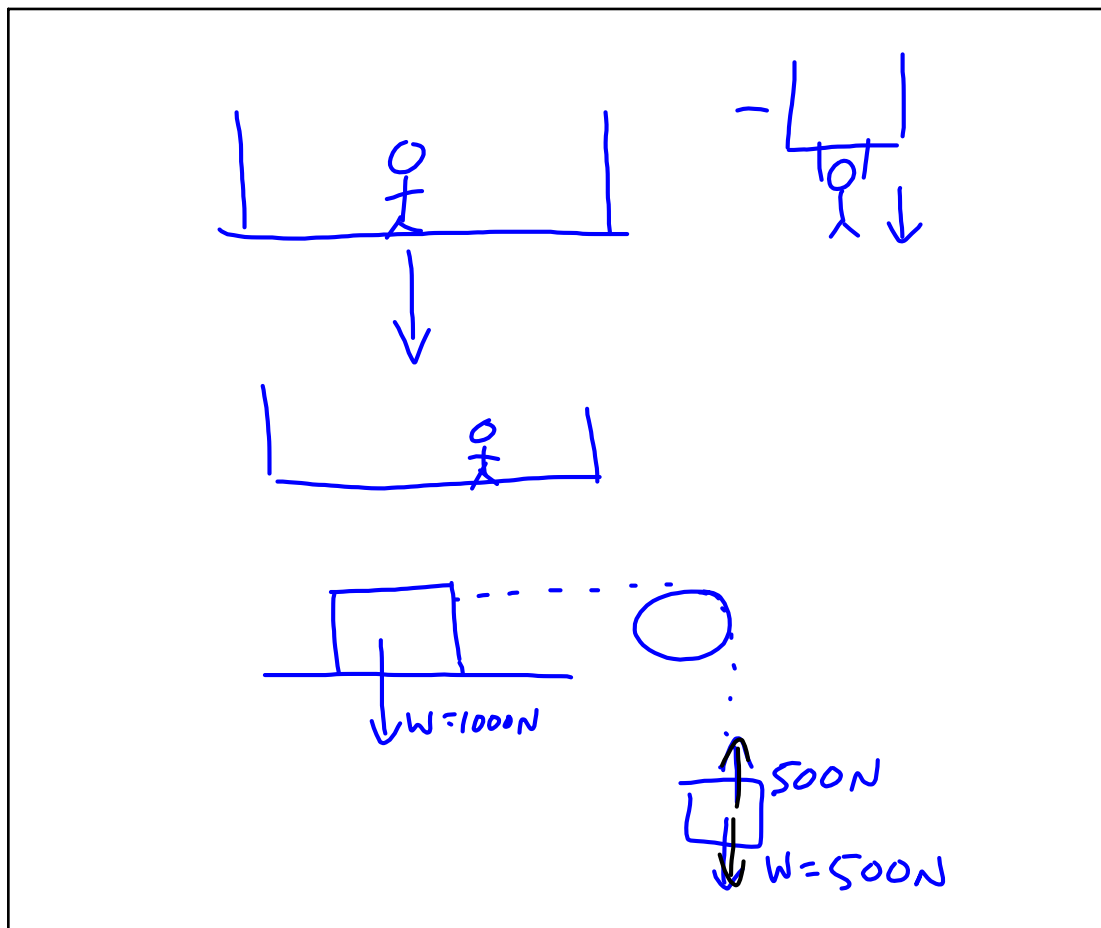
Sep 16-2:23 PM

### Worksheet:

- \* Work on it alone or with one other person of your choosing. (Do both sides!) \*\*Can skip last question (advanced)
- \* Ask! if you're not sure because it will be part of today's 3 questions.
- \* When you're done:  
 Can you invent a question about the equilibrium rule? How could you make a variation or change it up?

$$\Sigma F_{up} = \Sigma F_{down} \quad \text{GRAVITY}$$

Sep 17-8:21 AM



Sep 17-8:40 AM

### Daily 3 Questions

- \* Every day except test/project days
- \* 3 Questions on the topics of the day
- \* Main source of daily points
- \* I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

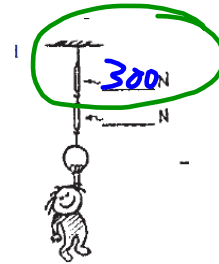
You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

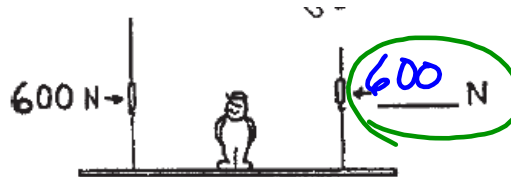
Sep 9-7:32 AM

1. The Equilibrium Rule says that in equilibrium the sum of the forces equals **ZERO**

2. Nellie weighs 300N. What is the reading on the top scale?



3. Burl is standing in the exact middle of the board. What is the reading on the other scale?



Sep 14-7:28 AM

### Apple Results...

Archie - Air pressure

Sam - Only gravity **||||**

Soledad - desk pushes, gravity pulls **||||**

Misha - holding force in the apple **||**  
(many forces)

Tess - no forces (desk stops them)

(open textbook to page 17)

What do you think the author of our textbook would say?

Sep 20-1:38 PM